

WHAT IS CLAIMED IS:

1. A wireless communication method for use in
a spread spectrum communication system which performs
frequency hopping using a plurality of frequency
5 channels having different carrier frequencies and
defined in a specified frequency band, the method
comprising:
detecting a carrier of another wireless
communication system that performs a wireless
10 communication by using the specified frequency
band; and
excluding a frequency channel of the plurality of
frequency channels in which the carrier of said another
wireless communication system is detected, from
15 frequency channels targeted for the frequency hopping.
2. The wireless communication method according
to claim 1, wherein wireless communication of the
spread spectrum communication system is conducted by
a master-slave system, the carrier of said another
20 wireless communication system is detected by a master
in the spread spectrum communication system, and said
excluding includes notifying a slave of a stop of use
of the frequency channel in which the carrier of said
another wireless communication system is detected by
25 the master.
3. The wireless communication method according to
claim 1, further comprising:

determining again whether the carrier of said another wireless communication system is present in the frequency channel excluded from the frequency channels targeted for the frequency hopping; and

5 adding the excluded frequency channel to the frequency channels targeted for the frequency hopping when the carrier of said another wireless communication system is not detected.

10 4. The wireless communication method according to claim 1, wherein said another wireless communication system is a spread spectrum-direct sequence communication system, and said detecting includes de-spreading a received radio signal by using a spread code used in said another wireless communication system
15 to detect the carrier of said another wireless communication system.

20 5. The wireless communication method according to claim 1, wherein wireless communication of the spread spectrum communication system is conducted by a master-slave system, and the carrier of said another wireless communication system is detected by a master in the spread spectrum communication system, before a radio link is constructed between the master and slave.

25 6. The wireless communication method according to claim 5, wherein said master generates a code indicating a hopping pattern excluding a frequency channel in which the carrier of said another wireless

communication system is detected, and notifies the slave of the code.

7. The wireless communication method according to claim 1, wherein said detecting includes executing
5 a carrier sense process to determine whether the carrier of the second wireless communication system is present in each of the plurality of frequency channels.

8. A method of preventing interference of a signal between first and second wireless
10 communication systems using a same frequency band, the first wireless communication system performing a spread spectrum-frequency hopping by using a plurality of frequency channels having different carrier frequencies and defined in the frequency band, the method
15 comprising:

determining whether a carrier of the second wireless communication system is present in each of the plurality of frequency channels; and

limiting frequency channels used for a frequency
20 hopping in the first wireless communication system to frequency channels other than a frequency channel in which the carrier of the second wireless communication system is detected.

9. The wireless communication method according to
25 claim 8, wherein said second wireless communication system is a spread spectrum-direct sequence communication system, and said detecting includes

de-spreading a received radio signal using a spread code used in said second wireless communication system to determine whether the carrier of said second wireless communication system is present.

5 10. A wireless communication apparatus of a spread spectrum communication system which performs frequency hopping using a plurality of frequency channels having different frequencies and defined in a specified frequency band, the apparatus comprising:

10 a detecting unit configured to detect a carrier of another wireless communication system that performs a wireless communication by using the specified frequency band; and

15 a excluding unit configured to exclude a frequency channel of the plurality of frequency channels in which the carrier of said another wireless communication system is detected, from frequency channels targeted for the frequency hopping.

20 11. The wireless communication apparatus according to claim 10, further comprising:

25 a unit which determines again whether the carrier of said another wireless communication system is present in the frequency channel excluded from the frequency channels targeted for the frequency hopping; and

 a unit which adds the excluded frequency channel to the frequency channels targeted for the frequency

hopping when the carrier of said another wireless communication system is not detected.

12. The wireless communication apparatus according to claim 10, wherein said another wireless communication system is a spread spectrum-direct sequence communication system, and said detecting unit includes a unit which de-spreads a received radio signal by using a spread code used in said another wireless communication system to detect the carrier of said another wireless communication system.

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